

# **The Causes of Rising Opinion Dissensus on Taiwan's Constitutional Court**

Yen-tu Su

(Institutum Iurisprudentiae, Academia Sinica)

Han-wei Ho

(Institutum Iurisprudentiae, Academia Sinica)

**January 2016**

Prepared for presentation at Southern Political Science Association (SPSA) Annual Meeting, San Juan, Puerto Rico, January 7, 2016.

## **Abstract**

Defined as the non-unanimity of judicial opinion as recorded by individual judges' concurrences and/or dissents, the opinion dissensus on Taiwan's Constitutional Court (TCC) has risen steadily and markedly in the past decade or so. What drives the Justices of TCC to write separately, and what has turned more Justices into frequent opinionators? This paper looks into the possible causal explanations of this intriguing phenomenon, and subjects them to empirical testing. We utilize two case-based measures—Concurrence Score (CS) and Dissent Score (DS)—as our dependent variables, and we identify and assess 16 independent variables in four categories: demographics, composition diversity, agenda (case-specific), and institutional and collegial. The findings of our multiple regression analysis demonstrate that opinion dissensus on TCC has been shaped by a multitude of factors. In particular, we found a linkage between the rise of opinion dissensus on TCC since the mid-2000s and the 2003 institutional change regarding the term of the Justiceship, which has henceforth increased the composition diversity of the Court.

**Keywords:** Taiwan's Constitutional Court, opinion dissensus/consensus, concurrence, dissent, composition diversity, diversity indices

## 1. Introduction

Disagreement poses profound challenges to law's republic (Michelman, 1988; Waldron, 1999). As law's oracles, judges in a collegial court are often expected to speak for law in the voice of one, even and especially in hard cases. Moral, political, and/or doctrinal disagreement among judges, however, often makes it difficult, if not impossible, to have a heavenly chorus of law. Deliberation is often hoped to bring about consensus. But more often than not, judges of different convictions can only agree to disagree. At the end of the day, it takes a vote for a multi-member court to make a decision. Law's disagreement that conditions judicial decision-making becomes public in a regime where individual judges get to write and publish their own separate opinions. Under such permissible opinion-writing rules, we may speak of and observe *opinion dissensus*—i.e., the non-unanimity of judicial opinion as recorded by individual judges' concurrences and/or dissents. Thusly defined, opinion dissensus and consensus are two sides of a coin. Opinion dissensus sometimes may serve as a proxy for the undisclosed judicial votes, but it is also of great significance in its own right. For some, fragmented judicial opinions adversely weaken the authority of law. For others, outspoken dissenters help to plant the seeds for legal change (Henderson, 2007).

Taiwan's Constitutional Court (TCC) (a.k.a. the Justices of the Constitutional Court, or the Justices of the Judicial Yuan) is the only court in Taiwan that allows individual judges to issue concurring and dissenting opinions along with the *per curiam* opinion of the Court. The current rules for decision-making and opinion-writing in TCC were made in 1993. Although court watchers had noticed the increase in TCC's opinion dissensus during the 1990s (Tang, 1998), as late as mid-2000s, many of the Justices rarely or never wrote separately, and unanimous and highly consensus decisions (i.e., decisions with concurrences and no dissent) still constituted the majority of the Judicial Yuan Interpretations (the TCC's merit decisions). There has been a dramatic rise of opinion dissensus on TCC since late-2000s, however. More and more Justices wrote separately and frequently in the past decade, and TCC has not issued a single unanimous opinion since May 2010. For good or for bad, opinion dissensus has clearly become the new norm on TCC as a matter of fact.

Why has the opinion dissensus on TCC risen up so much in the recent few years? What drives the Justices of TCC to write separately, and what has turned more Justices into frequent opinionators? This paper looks into the possible causal explanations of this intriguing phenomenon, and subjects them to empirical testing. The existing literature on the separate opinion-writing on TCC generally treats

concurrences, dissents, and the lack thereof as, first and foremost, expressions of individual Justices' varying characters or judicial philosophies. Under this view, many students of TCC have sought to compare different types of Justices in terms of their propensity to write separately (Tang, 1998; Hwang, 2012; Chang, 2013). Some court watchers further attribute the rising opinion dissensus on TCC to the increasing number of Justices who (i) were educated in the United States (Weng, 2014), or (ii) specialize in public law (Hwang, 2012). There is also an emerging view in the literature that links opinion dissensus to the diversity/heterogeneity of the Court (Epstein, Landes, and Posner, 2013; Su, 2013a). Under this view, whether to write separately is not entirely an idiosyncratic decision of individual Justices, but can be affected by group dynamics inside the chamber as indicated by the Court's composition diversity. Unlike their counterparts in the United States, however, students of TCC have yet to consider the possibilities that opinion dissensus on TCC may have to do with the Court's docket, leadership and/or collegiality (Hettinger, Lindquist, and Martinek, 2007; Corley, 2010; Corley, Steigerwalt, and Ward, 2013; Epstein, Landes, and Posner, 2013).

This paper proceeds from the assumption that opinion dissensus on TCC is shaped by a multitude of factors: It matters not only the personal-demographical attributes of individual Justices, but also the types of cases the Court heard, the institutional and collegial factors of TCC decision-making, and how diverse the Justices are as a group. In addition to testing the two demographics-based theses in the existing literature, we attempt to unfold the impacts of the multi-dimensional composition diversity of the Court, for we suspect that different dimensions of composition diversity have varying influences on opinion dissensus. While assuming opinion dissensus as resulting from the interaction of multiple factors, we nonetheless suspect that different contributing factors have varying influences on the Court's opinion dissensus at different periods of time. To the extent that the sources of opinion dissensus on TCC have incurred some noticeable changes over time, we may further speculate what caused the changes observed. Specifically, we argue that the dramatic rise of opinion dissensus on TCC since the second part of 2000s may be an unintended consequence of the post-2003 staggered terms of Justiceship, which may have accelerated and intensified the variation of the Court's composition along certain dimensions and thereby made it more difficult for the Court to reach opinion consensus.

For empirical inquiry, we investigate (i) the Taiwan Constitutional Court Interpretation Database (TCCID) (IIAS, 2015), which contains numerous attributes of the Judicial Yuan Interpretations issued between 1994 and 2013, and (ii) the Taiwan

Constitutional Court Justices Database (TCCJD) (IIAS, forthcoming 2016), which collects public information about individual TCC Justices appointed since 1985. Because a concurring opinion and a dissenting opinion usually tend to differ in kind or at least in degree, we use as our dependent variables the respective proportions of concurrences and dissents in every merit decision found in the TCCID. We first develop an aggregated model of opinion dissensus on TCC by applying multiple regression analysis to identify the respective sources of concurrences and dissents in four categories of independent variables: (i) demographic variables, (ii) dimensions of composition diversity, (iii) agenda-related variables, and (iv) institutional and collegial variables. We then divide the cases in TCCID into two periods—the unitary-term period (1994-2003) and the staggered-term period (2003-2013), and use two-segmented regression to identify the respective sources of opinion dissensus in these two periods. Although we cannot ascertain which factor has contributed more than others to the opinion dissensus on TCC for a given period of time, we expect to see and infer from a certain noticeable changes in the sources of opinion dissensus over these two periods.

From our multiple regression analysis, we found significant correlations between the two measures of opinion dissensus and several variables found in all four categories. Our basic assumption that opinion dissensus on TCC has been shaped by the interaction of multiple factors is thereby confirmed. To be specific, we found some evidence that, with more Justices of public law background sitting on the Court, opinion dissensus tends to increase as anticipated. However, the appointment of more Justices trained in the United States is only significantly correlated to one measure of opinion dissensus during the staggered-term period. All of the 6 dimensions of composition diversity we indexed (generation, gender, prior occupation, foreign education background, nominating Presidents, and ideology) have statistically significant correlations with opinion dissensus measures in either or both of the segmented regression models. Though a few of these correlations run contrary to our expectations, our main contention that the institution of the staggered term since 2003 has contributed to the subsequent rising opinion dissensus on TCC can find support in the findings that the two diversity index on foreign education background and nominating Presidents are positively and significantly correlated with the opinion dissensus measures only during the staggered-term period. Our analysis also found that, all else being equal, the Court is more likely to render decisions without any dissents under the leadership of Chief Justice Wen Yueh-sheng; under the leadership of Chief Justice Rai Hau-min, however, the Court is much less likely to render unanimous decisions. Given the limited role of the Chief Justice in Taiwan, it remains to be studied why there is such a marked difference between leaderships.

## 2. The Rising Opinion Dissensus on TCC: Institutional Background and Three Measurements

For some constitutional jurists in Taiwan, opinion dissensus on TCC is somewhat problematic from a normative point of view. Although the practice of separate opinion-writing on TCC dated back to 1958, several rules and traditions of TCC have arguably been instituted to facilitate the making of opinion consensus. And for years, some prominent jurists, including Dr. Weng Yueh-sheng (翁岳生), a public law guru in Taiwan and the most senior Justice ever served on TCC, have advocated for the norm of consensus to be applied—at least in highly controversial cases (Weng, 2009; Yeh, 2009). To be sure, not all people feel uncomfortable in the face of law's disagreement, and whether there ought to be some kind of consensual norm for TCC opinion-writing remains a matter of debate (Lee, 1999; Chen, 1999; Lin, 2014). To explain why opinion dissensus on TCC is such a matter of controversy in Taiwan, this section first introduces the relevant institutional settings of TCC.

Just looking at the increasing number of separate opinions issued by TCC, one simply cannot ignore or dispute the clear fact that opinion dissensus on TCC has been in the rise for the past two decades. There are, however, different ways to measure the opinion dissensus on TCC, and the measurement we choose reflects and further frames our understanding of what was going on. This section also introduces three measurements of TCC's opinion dissensus and argues for the concurrence score (CS) and dissent score (DS) as the primary measures to be used.

### 2.1. Decision-Making and Opinion-Writing on TCC

Since 1993, the workings of TCC have been governed primarily by the Constitutional Interpretation Procedure Act (CIPA), the most critical design of which is arguably the decision rules it sets forth. In the previous era (1958-1993) it took 3/4 majority of Justices to adjudicate constitutional cases. Under CIPA, by contrast, TCC applies 2/3 majority rule and simple majority rule to different types of cases. Not surprisingly, there had been notable changes in the Court's opinion consensus/dissensus before and after CIPA took effect (Tang, 1998).

CIPA, however, does not alter much of the traditions concerning the case assignment, deliberation, decision format, and opinion-writing process on TCC. Notwithstanding the identity it prefers, TCC is still organized as a council as opposed to a court of law, and its merit decision—named as Judicial Yuan Interpretation—is a collective work of participating Justices, even including those who voted against the (super-)majority (Su, 2013b). During the review sessions held in secrecy, the Justices are known to deliberate rather scrupulously on the wordings of the *per curiam*

Holding and Reasoning of a Judicial Yuan Interpretation, which was first drafted by a three-Justice panel (the identity of which was unknown to the public) and was substantively revised and voted on by all of the attending Justices. It usually takes a lot of time for the Justices to produce an authoritative opinion of the Court. And at the end of the day, individual Justices could still choose to write or join concurring or dissenting opinions, which will be published under their names. As the opinion dissensus on TCC has risen remarkably in the recent years, the puzzle or irony that such a deliberative decision-making and opinion-writing process should lead to widespread disagreement is hard to ignore (Su, 2013b).

## 2.2. Unanimous v. Non-Unanimous Opinions: Fraction Comparison

Following the standard practice that introduces the empirical analyses of the opinion consensus/dissensus on the U.S. Supreme Court (Walker, Epstein, and Dixon, 1988; Caldeira and Zorn, 1998; Hendershot, Hurwitz, Lanier, and Pacelle, Jr., 2012), we first illustrate the recent changes in TCC's opinion dissensus by calculating and comparing the fractions of the unanimous and non-unanimous TCC decisions per year during the period of 1994-2013. As Figure 1 indicates, TCC's non-unanimous decisions—i.e., TCC decisions with separate opinions—had twice outnumbered its contemporaneous unanimous decisions during the mid-1990s and the early-2000s. Since 2004, however, TCC had issued far more non-unanimous decisions than unanimous ones for most of the time, and since 2011, all TCC decisions had been accompanied by separate opinions.

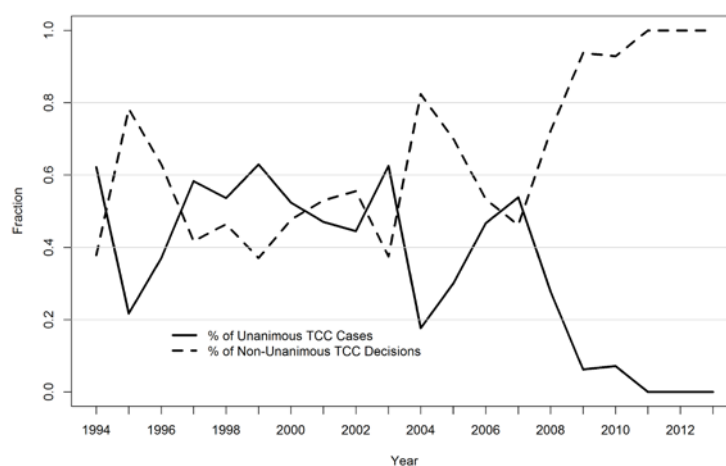


Figure 1: Fractions of Unanimous and Non-Unanimous TCC Decisions, 1994-2013.

Source: TCCID (IIAS, 2015)

Although Figure 1 clearly demonstrates the trends in TCC opinion consensus/dissensus during the observed period, it does not reflect the varying degrees of non-unanimity in TCC decisions, because it does not take into consideration how many separate opinions were filed in a given case. The dramatic increase in the fraction of non-unanimous TCC decisions after 2008 may have also been affected by the fact that TCC had delivered less and less merit decisions since then (Su, 2014). Still, it is quite striking from a comparative perspective that the fraction of TCC unanimous decisions had twice dropped below 20% in the past decade and had even dropped to and stayed at zero since 2011.

### 2.3. Dissenting/Concurring Averages: Justice-Based Statistics

Whether to write a separate opinion is ultimately a matter of personal choice for individual Justices. Given the opportunities to write separately, we may be interested in knowing how often a Justice, or a group of Justices, chooses to do so. Like the calculation of batting averages in baseball, we calculate the career dissenting average (DA) and concurring average (CA) of each individual Justice who served during 1994-2013. The career dissenting average of a single Justice ( $J$ ), for instance, = (the weighted number of dissents  $J$  ever issued) / (the number of Judicial Yuan Interpretations  $J$  ever voted on). We take as given a separate opinion’s self-reference as a dissenting opinion. But 1 point is assigned to a given separate opinion if it amounts to a full dissent, and 0.5 point if it is partly dissenting and partly concurring. We make no distinction between “writing” and “joining” a separate opinion, and we count all separate opinions a Justice wrote or joined in a given case. The rankings of individual Justices’ career CAs and DAs are reported in Appendix 1 and 2.

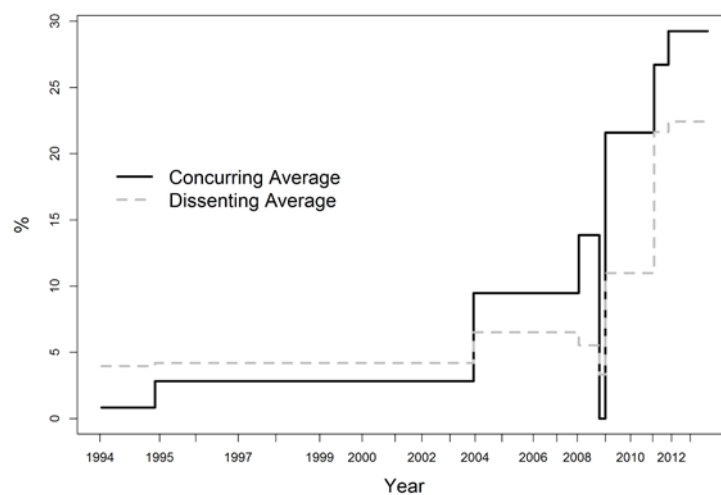


Figure 2: Team Concurring/Dissenting Averages of TCC Justices, 1994-2013

Source: TCCID (IIAS, 2015)

Treating each time the Court’s composition changes as the inauguration of a new court, we can further calculate the team concurring/dissenting averages of TCC Justices during the observed period. As shown in Figure 2, Justices appointed to the Court after 2004 had written separate opinions far more often than their predecessors, and unlike Justices appointed to the Court before 2004, they have produced more concurrences than dissents. The team concurring and dissenting averages of TCC Justices had risen from low digits in the 1990s and early 2000s to 29.24% and 22.43% respectively after 2012. These trends suggest that change in the Court’s composition may be a potent driving force behind the rising opinion dissensus on TCC in the past decade. The concurring and dissenting averages by court (team) are crude measures for opinion dissensus on TCC, however, for they average out the differences among Justices and among cases.

#### 2.4. Concurrence/Dissent Scores: Case-Based Statistics

Considering that opinion dissensus on TCC varies from case to case, and that a concurrence and a dissent are distinct from each other, we construct two case-based measures of opinion dissensus for TCC’s merit decisions: the concurrence score (CS) and the dissent score (DS). For an observed Judicial Yuan Interpretation  $I$ ,

$$CS = \frac{\text{(the number of Justices signing concurring or concurring-in-part opinions)}}{\text{(the number of Justices voted on the Interpretation)}}$$

$$DS = \frac{\text{(the number of Justices signing dissenting or dissenting-in-part opinions)}}{\text{(the number of Justices voted on the Interpretation)}}$$

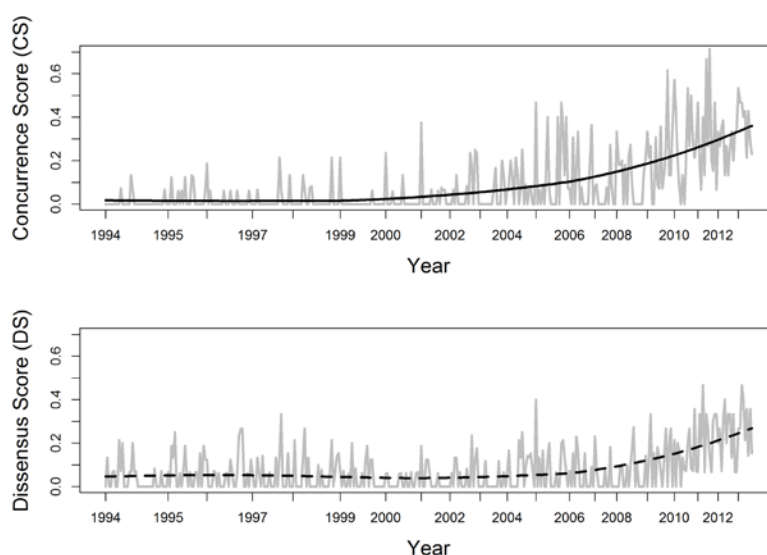


Figure 3: Concurrence/Dissent Scores of TCC Decisions, 1994-2013

Source: TCCID (IIAS, 2015)



As Figure 3 shows, while there were marked fluctuations of concurrence/dissent scores from case to case—with CS ranging from 0 to 0.7 and DS from 0 to 0.5, both of the measures registered upward trends in the observed period. Because CS and DS take each Judicial Yuan Interpretation as the unit of analysis and quantify the opinion dissensus of a given case as a matter of degree, they provide a more informative picture of the rising opinion dissensus on TCC than the previous two measures do. CS and DS, moreover, can be used directly as dependent variables for further statistical analyses. We seek to justify this strategy in Section 4.3.

## **2.5. Features of the Trend**

Our descriptive analyses so far have revealed some interesting features of the rising opinion dissensus on TCC over the past two decades. First, although we can speak of separate opinion-writing and the resulting opinion dissensus in general, there are tangible differences between the trends in concurring and dissenting opinion-writing. There used to be more dissents than concurrences in TCC before the early 2000s, but from then on, the concurrences had gradually outnumbered the dissents. And whereas the CS had begun to rise since the early 2000s, the DS did not pick up its pace until 2006. Secondly, although all three measurements of the opinion dissensus on TCC indicate its rising trend during 1994-2013, they appear to suggest different points in time as to when the trend took shape. To the extent that our primary measures for opinion dissensus on TCC—the CS and DS—had increased steadily over time rather than abruptly or periodically, we suspect that the trend cannot be adequately explained by the personnel changes in the Court's composition.

## **3. Theories and Hypotheses**

Why has the general trend of opinion dissensus on TCC as measured by CS and DS become higher and higher without stopping since the mid-2000s? Although we take the view that opinion dissensus is a multivariate phenomenon, we share the prevailing intuition among students of TCC that this rising trend may be driven mainly by changes in the Court's composition—both in terms of (i) the attributes of individual Justices and (ii) the composition diversity of the Justices as a group (Tang, 1998; Hwang, 2012; Chang, 2013; Su, 2013a). According to this school of thought, the rising opinion dissensus on TCC is a by-product of judicial appointment: It is because disagreement-prone Justices had been appointed to the Court more than ever, and/or because the recent appointments had made the Court more heterogeneous and thereby more prone to disagreement. These appointment-induced changes in the demographics/composition of the Court, in turn, have been preceded and further

sharpened by a Constitutional change that took effect in October 2003, i.e., the institution of the staggered term in place of the unitary term of the previous era. We therefore theorize the rising opinion dissensus on TCC since the mid-2000s as an unintended consequence of this institutional change. To be sure, there are still quite a few case-specific, institutional and/or collegial factors that may affect the opinion dissensus on the Court, and their influences need to be controlled (Walker, Epstein, and Dixon, 1988; Wahlbeck, Spriggs II, and Maltzman, 1999; Hendershot, Hurwitz, Lanier, and Pacelle, Jr., 2012; Corley, Steigerwalt, and Ward, 2013). However, we still need more information to develop a plausible alternative to the demographics/composition theories about the rising opinion dissensus on TCC.

### **3.1. Demographics-Based Theories**

Whether to write separately is a choice facing individual Justices, and the choice a Justice made in this regard is often considered an expression of what sort of Justice he or she is (or intends to be). Some Justices are “team players” in the sense that they would rather keep whatever differences they have with the majority within the closed chamber than let their disagreement known to the public. Other Justices, by contrast, approach their task of judging in a more independent manner, and would not shy away from issuing concurrences or dissents if so dictated by their conscience (George, 2008: 1357). The track records of judicial behavior on TCC (such as the concurring and dissenting averages of individual Justices as reported in Appendix 1 and 2) suggest that, typically speaking, some of the Justices are just more prone to concur and/or dissent than others, whereas some other Justices are way more averse to writing separately than others. Moreover, of the top 20 Justices with highest career concurring averages during 1994-2013, all but one were appointed to the Court after 2003. Likewise, the post-2003 appointments account for 16 out of the 20 most frequent dissenters of the Court during the same period. The rise of opinion dissensus on TCC after the mid-2000s, therefore, may intuitively be attributed to the growing number of disagreement-prone Justices appointed to the Court after 2003. In addition, we suspect that, once sitting on the Court, these rather opinionated Justices might serve as role models within the Court and exert peer pressure on their colleagues to follow suit.

*Hypothesis 3.1.1. With the appointments of a few Justices who are prone to write separately, there would be higher opinion dissensus on TCC.*

Why are some Justices more inclined to write (or join) separate opinions than others? Many students of judicial behavior in Taiwan emphasize the effects of Justices' social backgrounds on concurrences and dissents, and the most oft-discussed variable concerns about the career path of an individual Justice—i.e., whether the Justice was

recruited from legal academia, or from legal practice. In the previous era, practitioner-Justices used to be a little bit more opinionated than scholar-Justices (Tang, 1998), but the past two decades have witnessed a sharp and clear reversal of the pattern (Hwang, 2012; Chang, 2013). Since the parity between scholar-Justices and practitioner-Justices on TCC had not incurred significant changes during the observed period, however, for the present purpose we need to identify the disagreement-prone Justices in a more specific manner. Hwang (2012) notes that, during the 2000s, many separate opinions were issued by public law scholars on the bench. Considering that constitutional law and administrative law cases constitute the bulk of the Court's docket, which in turn is keenly followed first and foremost by those who study public law in Taiwan, it is reasonable to expect that those Justices whose scholarship focus on public law may have more to say—and also may want to say more—to their colleagues and students from outside the Court.

*Hypothesis 3.1.2. Justices whose research areas are public law tend to write more separate opinions than their peers.*

Many TCC Justices, just like many law professors in Taiwan, received their graduate-level legal education in foreign countries including, among others, Germany and the United States. Thanks in part to this ongoing tradition of the way many if not most of the elite jurists in Taiwan were trained, the German and the American jurisprudence have profound influence on Taiwanese law in general and the jurisprudence of TCC in particular. Given that concurrences and dissents are much more common in the United States than in other jurisdictions, we suspect that American-trained Justices on TCC would be more disagreement-prone than their peers as they might be more open to separate opinion-writing by training.

*Hypothesis 3.1.3. Justices ever educated in the United States tend to write more separate opinions than their peers.*

### **3.2. Dissensus as a Function of Composition Diversity**

Diversity/heterogeneity is a compositional feature of the Court taken as a group. A court is considered a heterogeneous group if its judges have notable differences along certain dimensions that are deemed significant in terms of either group composition or collective decision-making. Having a diverse panel may help to reduce the risk of groupthink and even enhance the quality or legitimacy of the decisions made (Epstein, Knight, and Martin, 2003). But composition diversity can also make group consensus more difficult to achieve. “[T]he more heterogeneous a panel,” Epstein, Landes, and Posner argue, “[...] the less likely the judges are to think alike, to understand and trust each other, to have similar priors, and in short to be

predisposed to agree” (Epstein, Landes, and Posner, 2013: 257). The present Justice-and-Vice-President of the Judicial Yuan Dr. Su Yeong-chin makes a similar speculation that the rising opinion dissensus on TCC in the recent years might be attributed to the fact that the Court has become more and more diverse as a result of Taiwan’s transition to democracy in the early 1990s (Su, 2013a).

*Hypothesis 3.2.1. The more diverse the Court’s composition, the higher degree of opinion dissensus it would have.*

Taiwan’s democratization is at best a distant cause for TCC’s increasing heterogeneity, however, and we think a much more direct cause can be found in the institutional change about the terms and appointments of TCC Justices in 2003. Before October 2003, TCC Justices served a unitary 9-year term, which was counted irrespective of when an individual Justice received his/her appointment, and most of the Justices were simultaneously appointed to the Court by the President. The Constitution was amended in 1997 to the effect that, (i) of the 15 Justices to be appointed to the Court in October 2003, 8 would serve a 4-year term, and (ii) except for those 8 Justices, each Justice would serve a nonrenewable term of 8 years, which are calculated on an individual basis. To wit, the terms of the Justices have been staggered thereafter. The operation of this new scheme, we argue, has accelerated and intensified the variation of the Court’s composition, and as a result, we expect to see more diversity-induced opinion dissensus in the staggered-term period than in the previous unitary-term period.

*Hypothesis 3.2.2. Composition diversity would be more significant a factor for opinion dissensus on TCC in its staggered-term period than in its unitary-term period.*

The composition diversity hypothesis, while making intuitive sense, might be too general a claim to withstand close scrutiny. After all, under a certain level of generality, we can always find that the Justices look like one another in some aspects but not in others, and not all their differences matter to the same degree. We need to figure out which dimensions of composition diversity matter for what kinds of opinion dissensus. Following the judicial politics literature on the U.S. Supreme Court (Wahlbeck, Spriggs II, and Maltzman, 1999; Segal and Spaeth, 2002; Clark, 2009), we expect to see more dissents in cases where the Justices registered higher degree of ideological divergence, or were nominated to the Court by different Presidents. We suspect that some other dimensions of composition diversity are of less political ramifications, but they might still have some effects mainly on the concurrence opinion-writing on TCC.

*Hypothesis 3.2.3. The Court's composition diversity in certain dimensions of less political ramifications (such as generation, gender, prior occupation, and education background) may affect the production of concurring opinions, whereas divergence in ideology and nominating Presidents tends to increase dissents.*

## **4. Data and Methodology**

Using the two TCC databases assembled by the research team at IIAS, this paper is geared to subject the aforementioned theories to empirical testing. We evaluate all of the potential factors for the concurrence/dissent scores of TCC decisions in an aggregated model and in two segmented models. Although we could only make limited inference about the relative significance of different sets of independent variables, we believe the multiple regression models we develop here better account for the complex interactions among the multiple factors that may have affected the rising opinion dissensus on TCC.

### **4.1. Data: the TCCID and the TCCJD**

For data concerning attributes of TCC decisions, we mainly use TCCID (IIAS, 2015), which currently covers the 384 merit decisions TCC made during 1994-2013. For every covered Judicial Yuan Interpretation, TCCID provides 47 pieces of coded information about the procedure and substance of the case. We also develop a Political Salience Index (PSI) to quantify the respective political salience of the decisions found in TCCID.

We employ TCCJD (IIAS, forthcoming 2016) for data concerning attributes of TCC Justices served during 1994-2013. For every Justice appointed to the Court since 1985, TCCJD provides 20 pieces of coded information about the Justice's biography as could be found in public records. In addition, we use an expert survey to determine the ideological leaning and scholarship concentration of each Justice found in TCCJD. From TCCID we know which Justices voted on a given case. We therefore could translate the information about individual Justices into information about the participating Justices in a given Judicial Yuan Interpretation, which is the unit of analysis in this present study.

### **4.2. Independent Variables**

We identify 16 independent variables in four categories: (i) demographic variables, (ii) dimensions of composition diversity, (iii) agenda-related variables, and

(iv) institutional and collegial variables. Table 1 is the summary of variable descriptions, and Table 2 reports descriptive statistics for each variable.

Table 1: Variable Descriptions

Variable	Variable Coding Scheme /Subcategories for Diversity
<b>Demographic Variables</b>	
Public Law Background	A case-wise average based on individual Justice’s concentration in areas of constitutional law and administrative law. For determination of relative weights in various areas of research for each Justice, see section 4.2.1.
Education in U.S.	Measured as % of Justices ever educated in the U.S.
<b>Dimensions of Composition Diversity</b>	
Gender	Male or female.
Generation	The Justice’s age at the time of decision, converted into four cohorts with categories: 41-50, 51–60, 61–70, and 71-80.
Prior Occupations	Based on the Justice’s most recent job before appointment. Five subcategories were considered: (1) extra-judicial governmental service, (2) judicial service, (3) law professors, (4) attorney at law, and (5) others.
Foreign Education Background	The foreign countries Justices went for study. If a Justice studied at more than one country, we count the country he/she stay the longest. Five subcategories were recognized: (1) United States, (2) Germany, (3) Austria, (4) Japan, and (5) none of the above.
Nominating Presidents	The Presidents who nominated the Justices. With four subcategories: (1) Chiang Ching-kuo (蔣經國), (2) Lee Teng-hui (李登輝), (3) Chen Shui-bian (陳水扁), and (4) Ma Ying-jeou (馬英九).
Ideology	Five subcategories were considered: (1) liberal, (2) moderate liberal, (3) moderate conservative, (4) conservative, and (5) unknown.
<b>Agenda-Related Variables</b>	
Political Salience Index	The total number of coverages related to the Interpretation before and after the decision was rendered.
Case Outcomes	Dummy variables indicating the results of the decisions as either (1) constitutional, (2) unconstitutional, or (3) non-constitutional. The dummy variable for Constitutional was served as the

Variable	Variable Coding Scheme /Subcategories for Diversity
	baseline for comparison. For details, see discussion in Section 4.2.3.
Word Counts	The word counts of the Holding and Reasoning of a JY Interpretation.
<b>Institutional and Collegial Variables</b>	
2/3 Majority Rule Applied	Coded 1 if at least one issue applied 2/3 majority decision rule, and 0 if the case was decided by simple majority rule.
Leadership	Dummy variables the terms of the Court by leadership. The dummy variable for the Fifth Term was used as baseline.
Overlap Period in Days	Measured as how long in days the Justices had worked together at the time of decision.
Workload	Measured as the total number of JY Interpretations and pending petitions in the year when the decision was rendered.
Plenary Docket size	Measured as the number of JY Interpretations in the year when the decision was rendered.

Table 2: Descriptive Statistics of Independent Variables (N=384)

Panel A: Continuous Variables

	Mean	Std. Dev.	Min.	Max.
Public Law Background	0.367	0.093	0.147	0.561
Education in U.S.	0.242	0.109	0.067	0.6
DI gender	0.173	0.104	0	0.42
DI generation	0.46	0.126	0	0.684
DI prior occupation	0.572	0.076	0.255	0.675
DI foreign education background	0.664	0.034	0.540	0.736
DI nominating Presidents	0.074	0.164	0	0.5
DI ideology	0.732	0.036	0.665	0.797
Political Salience Index	1.109	1.397	0	4
Word Counts (in log)	7.380	0.590	5.768	9.611
Overlap Period in Days (in log)	6.359	1.084	2.079	8.097
Workload (in log)	5.259	0.241	4.868	5.889
Plenary Docket size	21.495	7.224	9	37

## Panel B: Categorical Variables

	%
Case Outcomes	
Constitutional	48.44
Unconstitutional	40.89
Non-constitutional	10.68
2/3 Majority Rule Applied	54.17
Leadership	
The 5 <sup>th</sup> term	8.07
The 6 <sup>th</sup> term	52.34
Chaired by Justice Weng Yueh-sheng	16.93
Chaired by Justice Lai In-jaw	11.72
Chaired by Justice Rai Hau-min	9.12
Chaired by Other Justices	1.82

## 4.2.1. Demographic Variables

We take into considerations two independent variables concerning the demographics of the Court's composition in a given Judicial Yuan Interpretation: *Public Law Background*, and *Education in U.S.*. Based on Hypotheses 3.1.2. and 3.1.3., we expect to see higher opinion dissensus in cases in which more Justices either had public law background or were educated in the United States.

As a new measure developed by this paper, the *Public Law Background* for an observed Judicial Yuan Interpretation *I* is the average of participating Justices' individual connections with constitutional law and administrative law scholarship. Each individual Justice's public law connection, in turn, is calculated on the basis of an expert survey on Justices' research areas. We asked a group of 7 experts to choose and rank independently at most 3 out of the 9 subcategories of research areas for a Justice. If an expert chose only one research area for the Justice, we assigned 1 point to the chosen area. If an expert ranked two fields, we assigned 2/3 point to the first and 1/3 to the second. If an expert ranked three fields, 1/2, 1/3, and 1/6 point were assigned respectively to the first, second, and third field. We then aggregated the points each of the nine subcategories got from the 7 experts and divided them by 7 to obtain fractions indicating the Justice's concentration.

## 4.2.2. Dimensions of Composition Diversity



The categories/dimensions of diversity considered here include (1) *generation*, (2) *gender*, (3) *prior occupations*, (4) *foreign education background*, (5) *nominating Presidents*, and (6) *ideology*. We calculate the diversity index for each dimension separately.

Our measure of diversity  $D$  is calculated as  $1 - \sum_{i=1}^C p_i^2$ , where  $C$  is the number of subcategories and  $p_i$  is the proportion of individuals in the  $i$ th category. This index is essentially a variant of Simpson's index and is called the Index of Diversity (Benjamin H. Barton & Emily Moran, 2013). The index  $D$  ranges from 0 to 1, and the larger the number, the higher the diversity. A single overall diversity measure is not created here. This is because the diversity index  $D$  increases as the number of subcategories grows and hence the effect of an index with more number of subcategories would overwhelm the effect of the index with less number of subcategories. In addition, we hypothesize that different dimensions of diversity have varying influences on opinion dissensus (Hypothesis 3.2.3.).

An example of calculating the diversity index of *gender* is illustrated as follows. There are 13 Judges voted on Judicial Yuan Interpretation No. 716, and there was one female Justice among them. Thus, the diversity index of *gender* for Judicial Yuan Interpretation No. 716 is  $1 - \left( \left( \frac{1}{13} \right)^2 + \left( \frac{12}{13} \right)^2 \right) = 0.142$ .

The calculation of the diversity index of *ideology* is based on an expert survey as well. We asked a group of 7 experts to identify independently a Justice's ideological position as either (1) liberal, (2) moderate liberal, (3) moderate conservative, (4) conservative, or (5) unknown. The Cohen's  $\kappa$  with squared weights for ordinal scale shows a moderate to substantial inter-rater agreement among our 7 experts.

#### 4.2.3. Agenda-Related Variables

Not all cases are equally prone to disagreement. The existing literature on American judicial politics has identified a myriad of factors—such as legal certainty, issue complexity, political salience and legal salience—that would make some cases more likely to end up with disagreement among judges than others (Walker, Epstein, and Dixon, 1988; Wahlbeck, Spriggs II, and Maltzman, 1999; Hendershot, Hurwitz, Lanier, and Pacelle, Jr., 2012; Corley, Steigerwalt, and Ward, 2013). Here we use (1) *Political Salience*, (2) *Case Outcomes*, and (3) *Word Counts* to capture respectively the political salience, legal salience and complexity of a given TCC merit decision. TCC Interpretations with higher political salience, holdings of unconstitutionality, or with lengthier contents are expected to associate with higher degrees of opinion dissensus.

As a new measure to be included in TCCID in the future, the Political Salience Index (PSI) developed by this paper is the total number of coverages—as could be found in the UDN News Database (<http://udndata.com/>)—that are related to a given Judicial Yuan Interpretation before and after the decision was rendered. We use the UDN News Database because it is the only news database in Taiwan that matches the observed period of this research. We use issue-related keywords for the search of pre-decision coverages, and the citation of the Judicial Yuan Interpretation for post-decision coverages.

#### 4.2.4. Institutional and Collegial Variables

We control five institutional and collegial factors that may or may not affect the level of opinion dissensus on TCC: (1) *Decision Rules*, (2) *Justices' Overlap Period in Days* (i.e., the length of time the Justices had worked together), (3) *Workload*, (4) *Plenary Docket Size*, and (5) *Leadership*.

### 4.3. The Modeling Strategy

Because we conceive of opinion dissensus in a given case as essentially a product of systemic interactions of multiple factors rather than the aggregation of individual Justices' decisions to write or not to write separately, we utilize two case-based measures, CS and DS, as our dependent variables. We thereby depart from the conventional practice, which aims mainly at assessing the likelihood whether or not a Justice would concur or dissent. One limitation of using case-based measures as the dependent variables is that we are not able to control and single out the influence of individual Justices, especially those frequent opinionators. Otherwise CS and DS may serve as equally effective alternatives to the Justice-based binary variable. Furthermore, our model may have the advantage of making inference on more than the likelihood of separate opinion-writing.

Table 3 reports the summary statistics of CS and DS. As introduced in Section 2.4, the two dependent variables, Concurrence Score (CS) and Dissent Score (DS), are measured continuously between 0 and 1 excluding 1 in the form of fractions. If the number of cases where CS/DS=0 is small, we may think that the situations of no opinion dissensus occurred “by accident”. However, in our data, as show in Figure 4, there are non-negligible numbers of zeros in both CS and DS, accounting for 232 (or equivalently, about 60%) and 196 (about 51%) out of 384 Interpretations respectively. In this regard, we consider that the decisions resulting in proportions in 0 were not by happenstance, but were governed by a different process from decisions for proportions in the open interval (0, 1). We therefore analyze our data with the so-called zero-inflated beta model.

Table 3: Descriptive Statistics of Dependent Variables CS and DS

	No. of 0's	N	Nonzero Proportions			
			Mean	Std. Dev.	Min.	Max.
CS	232	152	0.210	0.146	0.059	0.714
Unitary-Term	188	46	0.118	0.072	0.059	0.375
Staggered-Term	44	106	0.251	0.151	0.067	0.714
DS	196	188	0.153	0.093	0.059	0.467
Unitary-Term	140	94	0.117	0.063	0.059	0.333
Staggered-Term	56	94	0.189	0.104	0.067	0.467

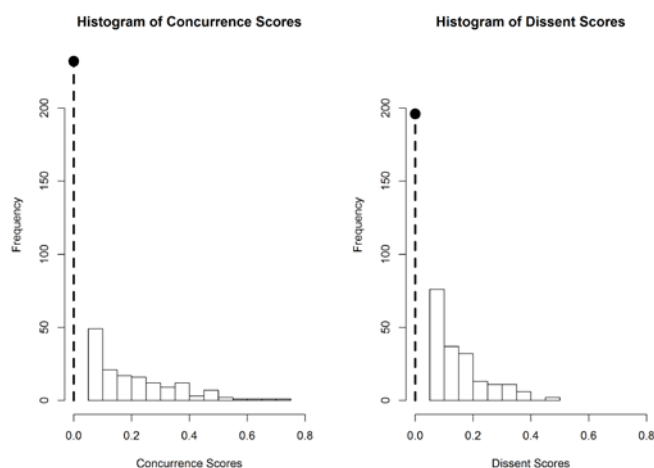


Figure 4: Histograms of the CS and DS of TCC Decisions, 1994-2013

Source: TCCID (IIAS, 2015)

Let  $y_t$  denote the CS/DS observed over time, where each  $y_t$ ,  $t = 1, \dots, 384$ , follows a zero-inflated beta distribution. The zero-inflated beta distribution is a mixture of (i) a beta distribution from the unit interval, and (ii) a degenerate distribution capturing the probability mass at 0 denoted by  $\pi$ , say. The density of the zero-inflated beta distribution can be expressed as

$$f(y; \pi, \mu, \varphi) = \begin{cases} \pi, & \text{if } y = 0, \\ (1 - \pi)f(y; \mu, \varphi), & \text{if } 0 < y < 1, \end{cases}$$

where the beta density  $f(y; \mu, \varphi)$  is parameterized as

$$f(y; \mu, \varphi) = \frac{\Gamma(\varphi)}{\Gamma(\mu\varphi)\Gamma((1-\mu)\varphi)} y^{\mu\varphi-1} (1-y)^{(1-\mu)\varphi-1}, \quad 0 < y < 1,$$

in which  $\mu$  is the mean (or the location parameter) and  $\varphi$  is the precision parameter of a beta distribution, whereas  $\Gamma(\cdot)$  is the gamma function. To associate changes in the expectation of  $y_t$  with changes in  $k$  explanatory variables  $x_{it}$ , we carry out the zero-inflated regression including a logistic regression to estimate the effects of  $x_{it}$  on the log odds of  $\pi$ , and a beta regression with logit link to estimate the effects of  $x_{it}$  on nonzero proportions. The same set of independent variables is used for both the logistic regression and the beta regression. For the sake of simplicity, we left the precision part of the beta regression fitted without covariates. The possible correlations between decisions rendered by the same court are accommodated by clustering on courts, and the robust estimator of variance is used.

To determine whether the independent variables have different impacts on nonzero proportions in different periods, the two-segmented regression is employed. Since the likelihoods of the logistic regression and the beta regression given  $\pi$  are maximized separately, we focus on the nonzero proportions of the two separate regressions for comparison.

## 5. Results

Table 4 reports the estimation results in our aggregated regression model.

Table 4: ML Estimates for Zero-Inflated Beta Models fitted to CS and DS

VARIABLES	CS	CS	DS	DS
	proportion	zeroinflate	proportion	zeroinflate
Public Law Background	5.091*** (1.370)	-3.425 (4.406)	-0.241 (0.718)	0.756 (2.443)
Education in U.S.	0.293 (1.227)	8.169* (3.411)	0.777 (1.175)	5.253*** (1.231)
DI generation	-0.843 (0.524)	1.566* (0.788)	0.897+ (0.490)	-1.027+ (0.591)
DI gender	-0.033 (0.993)	-2.245 (3.300)	1.344+ (0.811)	-1.159 (3.850)
DI prior occupations	0.264 (1.652)	1.270 (4.461)	-0.583 (0.496)	2.233 (2.999)

VARIABLES	CS	CS	DS	DS
	proportion	zeroinflate	proportion	zeroinflate
DI foreign education background	3.847 (3.664)	-8.584* (3.425)	2.904** (0.945)	-9.633* (3.817)
DI nominating Presidents	1.241+ (0.645)	-3.098* (1.256)	1.357* (0.561)	-1.571 (1.109)
DI ideology	-6.806 (5.977)	-21.999* (10.914)	-0.779 (1.482)	-32.321*** (3.678)
Political Salience Index	0.009*** (0.001)	-0.016 (0.012)	-0.001 (0.002)	-0.008* (0.004)
Case Outcomes (baseline: Constitutional)				
Unconstitutional	0.125 (0.138)	0.256* (0.128)	0.046 (0.084)	0.051 (0.244)
Nonconstitutional	-0.204 (0.267)	0.395 (0.373)	0.167+ (0.086)	-0.448 (0.308)
Word counts (in log)	-0.034 (0.081)	-0.836*** (0.135)	0.239* (0.101)	-1.136*** (0.275)
2/3 Majority Rule Applied	0.323*** (0.055)	-0.423 (0.293)	0.097 (0.103)	-0.283 (0.180)
Overlap Period in Days (in log)	0.057 (0.092)	-0.099 (0.097)	0.095*** (0.019)	-0.036 (0.246)
Workload (in log)	-0.373 (0.549)	-0.281 (0.588)	0.490* (0.237)	-1.728*** (0.160)
Plenary Docket size	0.017 (0.032)	0.031 (0.029)	0.002 (0.013)	0.016 (0.019)
Leadership (baseline: the 5th term)				
The 6th term	-1.312 (0.896)	1.328 (1.425)	0.197 (0.324)	0.020 (0.192)
CJ Weng Yueh-sheng	-0.329 (1.032)	0.491 (1.021)	-0.181 (0.381)	2.412+ (1.414)
CJ Lai In-jaw	-0.686 (1.190)	0.953 (1.243)	-0.137 (0.379)	1.998 (1.253)
CJ Rai Hau-min	-0.481 (1.414)	-14.986*** (1.906)	0.068 (0.492)	-16.405*** (1.410)
Chaired by other Justices	-0.808 (0.978)	0.234 (1.599)	-0.523 (0.363)	0.943 (0.973)

VARIABLES	CS	CS	DS	DS
	proportion	zeroinflate	proportion	zeroinflate
Constant	1.010 (5.108)	27.630** (10.016)	-8.888*** (1.854)	44.871*** (5.401)
ln( $\phi$ )		2.647*** (0.198)		3.236*** (0.170)
Observations	384	384	384	384
N_clust	8	8	8	8

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1

11 out of 16 variables have significant correlations with the concurrence scores of TCC merit decisions. Of these 11 variables, *Public Law Background*, *DI nominating Presidents*, *Political Salience Index*, and *2/3 Majority Rule Applied* have positive correlations with nonzero proportion CS, whereas *Education in U.S.*, *DI generation*, *DI foreign education background*, *DI nominating Presidents*, *DI ideology*, *Case Outcomes (unconstitutionality)*, *Word Counts*, and *Leadership (CJ Rai Hau-min)* affect the likelihood of CS=0. Contrary to our expectations, *Education in U.S.*, *DI generation*, and *Case Outcomes (unconstitutionality)* increase the likelihood of no concurrences. The other regression results are consistent with our hypotheses.

12 variables have significant correlations with DS. 4 of them (*DI generation*, *DI foreign education background*, *Word Counts*, and *Workload*) have positive correlations with nonzero proportion DS, and negative correlations with the likelihood of no dissents. Another 3 variables (*DI gender*, *Case Outcome (nonconstitutional)*, and *Overlap Period in Days*) have positive correlations with nonzero proportion DS, and yet another 3 (*DI ideology*, *Political Salience Index*, and *Leadership (CJ Rai Hau-min)*) decrease the likelihood of DS=0. *Education in U.S.* and *Leadership (CJ Weng Yueh-sheng)* are the only two variables that have positive correlations with the likelihood of DS=0, and only the former is against our hypothesis.

Table 5 reports the regression results of the two separate models for both CS and DS (nonzero proportions).

Table 5: ML Estimates for Two-Segmented Zero-Inflated Beta Models fitted to CS and DS (report proportion parts only)

VARIABLES	Unitary-Term		Staggered-Term	
	CS proportion	DS proportion	CS proportion	DS proportion
Public Law Background	-0.156 (10.014)	3.228*** (0.310)	6.074*** (0.627)	0.410 (0.914)
Education in U.S.	7.020 (14.186)	1.023 (0.774)	-0.277 (0.723)	3.996*** (1.164)
DI generation	-1.146 (1.569)	0.514* (0.220)	-2.476** (0.941)	-0.061 (1.126)
DI gender	3.534 (8.687)	-0.472*** (0.003)	-0.677 (0.869)	0.923 (0.865)
DI prior occupations	15.984 (24.961)	-0.526 (0.755)	-0.134 (2.288)	-2.497* (1.240)
DI foreign education background	-19.535 (27.000)	0.839 (1.944)	7.750*** (1.209)	7.364*** (1.240)
DI nominating Presidents	0.000 (0.000)	0.000 (0.000)	1.573* (0.675)	2.966*** (0.426)
DI ideology	-23.951 (57.735)	-1.935*** (0.379)	-7.473 (8.206)	1.383 (3.724)
Political Salience Index	0.011*** (0.002)	0.002* (0.001)	0.008*** (0.002)	-0.004+ (0.002)
Case Outcomes (baseline: Constitutional)				
Unconstitutional	0.147*** (0.035)	0.141+ (0.073)	0.118 (0.205)	-0.009 (0.154)
Nonconstitutional	0.217 (0.166)	0.101 (0.094)	-0.384 (0.263)	0.404*** (0.089)
Word counts (in log)	-0.220*** (0.028)	0.098*** (0.003)	0.057 (0.078)	0.466*** (0.096)
2/3 Majority Rule Applied	0.256 (0.184)	-0.098 (0.095)	0.333*** (0.071)	0.252* (0.124)
Overlap Period in Days (in log)	0.456*** (0.085)	0.078*** (0.017)	0.034 (0.123)	0.102* (0.041)

VARIABLES	Unitary-Term		Staggered-Term	
	CS proportion	DS proportion	CS proportion	DS proportion
Workload (in log)	0.623*** (0.125)	0.400* (0.202)	-1.687** (0.525)	-0.689 (0.649)
Plenary Docket size	-0.024*** (0.005)	-0.003 (0.003)	0.004 (0.073)	0.001 (0.029)
Leadership - CJ Weng Yueh-sheng (6 <sup>th</sup> Term)	-3.977 (9.737)	-0.230*** (0.002)		
Leadership - CJ Lai In-jaw			-0.508* (0.213)	0.218 (0.280)
Leadership - CJ Rai Hau-min			-0.124 (0.524)	1.015*** (0.243)
Leadership - Other Justices	-4.569 (10.164)	0.000 (0.000)	-0.391* (0.181)	-0.141 (0.330)
Constant	16.981 (49.085)	-5.360*** (0.309)	6.450 (7.476)	-9.222+ (5.209)
Observations	234	234	150	150
N_clust	2	2	6	6

Robust standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1

There are marked differences between the model for CS in the unitary-term period and its counterpart in the staggered-term period, as only 1 variable (*Political Salience Index*) has significant positive correlation with nonzero proportion CS in both periods. During the observed unitary-term period (1994~Sep. 2003), CS was boosted by *Political Salience Index*, *Case Outcome (Unconstitutionality)*, *Overlap Period in Days*, and interestingly, *Workload*. During the observed staggered-term period (Oct. 2003~2013), by contrast, CS had positive correlations with *Public Law Background*, *DI foreign education background*, *DI nominating Presidents*, *Political Salience Index*, and *2/3 Majority Rule Applied*. CS was dampened by *Word Counts* and *Plenary Docket Size* in the earlier period, and by *DI generation*, *Workload*, and *Leadership (CJ Lai In-jaw)* in the latter period.

Similarly, the two separate models for DS only have two common results: In both periods, the DS is boosted by *Word Count* and *Overlap Period in Days*. During



the observed unitary-term period, DS had significant positive correlations with *Public Law Background*, *DI generation*, and 5 other agenda-related, institutional and collegial variables. During the observed staggered-term period, by contrast, DS was positively correlated to *Education in U.S.*, *DI foreign education background*, *DI nominating Presidents*, and 5 other agenda-related, institutional and collegial variables. DS was dampened by *Leadship (6<sup>th</sup> Term)*, and somewhat surprisingly, by *DI gender* and *DI ideology* in the earlier period. DS was significantly and negatively correlated to *DI prior occupation* and *Political Salience Index* in the latter period.

## 6. Discussion

Although there is still much room for improvement, the multiple regression analysis of opinion dissensus on TCC has confirmed our basic thinking that opinion dissensus on TCC has been shaped by a multitude of factors. What matters are not only the traits of individual Justices, but also the case-specific factors, the institutional factors, and the group dynamics within the Court. By group dynamics (or panel effect), we mean not only the qualities of collegiality among the Justices, but also the group identities of the Court. It is difficult, of course, for outsiders of the Court to observe and assess how the group dynamics of the Justices contributed to the production of opinion dissensus. Our examination of how composition diversity affects case-based opinion dissensus, however, presents a strong circumstantial evidence that the whole Court is indeed more than the sum of individual Justices. Not surprisingly, the regressions taking the composition diversity into consideration are superior to those without diversity indices, for both CS and DS, after comparisons via the likelihood ratio tests.

Whereas Hendershot, Hurwitz, Lanier, and Pacelle, Jr. (2012) has taken note of the significant contribution of ideological polarization to the production of dissent on the U.S. Supreme Court, our study found that, in addition to diversity in ideology, several other dimensions of composition diversity may have affected opinion dissensus on TCC as well. We found, for instance, the more diverse the Court is in terms of how many Presidents appointed the Justices taking part in a given case, the higher CS and DS a TCC's merit decision would have. The more diverse the participating Justices' foreign education background in a given case, the less likely that the decision would have no concurrence or no dissent. Not all indices of composition diversity have significant positive correlations with nonzero proportion CS or DS, though. As shown in our two-segmented regression, *DI gender* and *DI ideology* had negative correlations with DS during the unitary-term period, whereas

*DI generation* and *DI prior occupations* had negative correlations with nonzero proportion CS and DS respectively during the staggered-term period. The distinction between diversity-induced concurrences and dissents is murkier than we hypothesized. To the extent that the Justices in general did not mistake dissent for concurrence or vice versa, it appears that many TCC Justices may have dissented on jurisprudential rather than ideological grounds. Whether it was the case remains to be studied.

Substantial differences do exist between the two separate models for the respective degrees of CS and DS in the unitary-term and in the staggered-term periods, and some of the differences—especially those concerning the demographics and composition diversity of the Court—clearly indicate changes induced by TCC appointments. In particular, in light of the findings that *DI foreign education background* and *DI nominating Presidents* are significant variables only in the staggered-term period, composition diversity appears to become more significant a factor for opinion dissensus as TCC shifted from unitary-term to staggered-term. When commenting on the recent developments of TCC in 2014, former Justice-and-President of the Judicial Yuan Dr. Weng Yueh-sheng speculated that the rising opinion dissensus on TCC in the recent years may be attributed to the institutional change that took effect in 2003. By imposing a one-term limitation and abolishing the unitary-term for the whole Court, former Chief Justice Weng argued that the institutional change in 2003 had weakened individual Justices' sense of belonging to a team, and encouraged them to pursue their individual reputation by writing separately more often than ever before (Weng, 2014). We would concur with former CJ Weng that, to a significant extent, the rising opinion dissensus on TCC since the mid-2000s may well be attributed to the institutional shift from the unitary-term to the staggered-term in 2003, but we would suggest a different explanation by emphasizing that the staggered appointments alone had made the Court more heterogeneous and thereby more prone to disagreement.

The significance of the leadership variables is yet another indication that group dynamics within the Court matters to the ebbs and flows of opinion dissensus. As Table 5 reports, DS was dampened significantly with the leadership of CJ Weng Yueh-sheng, but was heightened significantly when CJ Rai Hau-min presided the Court, whereas lower CS was attributed to the leadership of CJ Lai In-jaw. These results may come as a surprise, because the President of the Judicial Yuan was not even a Justice of TCC until 2003, and after 2003, the only official power the Justice-and-President of the Judicial Yuan (i.e., the Chief Justice of TCC) can wield is to preside over the oral arguments and the plenary sessions of TCC as a voting member of the Court. Exactly how Chief Justices affected opinion dissensus on TCC

is in need of further inquiry.

In any event, changes in the Court's demographics and group dynamics would not make much of a difference if there were a still robust norm of consensus, which arguably existed on the Court in the previous era. We conjecture that the close attention paid to the concurrences and dissents by the media and legal academia in the recent year might have also encouraged many Justices—especially those with public law background—to let their individual opinions known to their students, academic peers, and the public at large. It remains an issue of debate whether opinion dissensus is good or bad for the Court and for the society. But from many individual Justices' perspective, writing separately has arguably become more enjoyable, and a reward worth pursuing.

#### Appendix 1: Individual TCC Justices' Career Concurring Averages: 1994-2013

Rank	Justice's Name	Tenure	At Vote	Concurring Average
1	Chang-Fa Lo 羅昌發	2011/10~2019/09	25	76.00%
2	Mao-Zong Huang 黃茂榮	2008/11~2016/10	65	63.08%
3	Yeong-Chin Su 蘇永欽	2010/10~2018/10	35	45.71%
4	Te-Chung Tang 湯德宗	2011/10~2019/09	26	43.75%
5	Pai-Hsiu Yeh 葉百修	2008/11~2016/10	66	40.15%
6	Yu-hsiu Hsu 許玉秀	2003/10~2011/09	111	33.33%
7	Shin-Min Chen 陳新民	2008/11~2016/10	60	31.67%
8	SU, Beyue C. 陳碧玉	2011/10~2019/09	26	26.92%
9	Tzong-Li Hsu 許宗力	2003/10~2011/09	115	26.55%
10	Chun-Sheng Chen 陳春生	2008/11~2016/10	64	25.40%
11	Tzu-Yi Lin 林子儀	2003/10~2011/09	114	22.07%
12	Sea-Yau Lin 林錫堯	2007/10~2015/09	81	19.75%
13	Chen-Shan Li 李震山	2007/10~2015/09	77	19.08%
14	Ching-You Tsay 蔡清遊	2007/10~2015/09	82	14.63%
15	Feng-Zhi Peng 彭鳳至	2003/10~2008/09	70	13.04%
16	In-Jaw Lai 賴英照 02	2002/06~2003/09	18	11.11%
17	Yih-Nan Liaw 廖義男	2003/10~2007/09	65	9.38%
18	Sen-Yen Sun 孫森焱	1994/09~2003/09	187	8.82%
19	Jen-Shou Yang 楊仁壽	2003/10~2006/02	42	8.14%
20	Yu-Tien Tseng 曾有田	2003/10~2007/09	65	7.69%
21	Syue-Ming Yu 余雪明	2003/10~2007/09	64	7.14%

Rank	Justice's Name	Tenure	At Vote	Concurring Average
22	Ming Chen 陳敏	2008/11~2016/10	61	6.56%
23	Young-Mon Lin 林永謀 94	1994/09~2003/09	185	5.91%
24	Jyun-Hsiung Su 蘇俊雄	1994/09~2003/09	194	5.41%
25	Pi-Hu Hsu 徐璧湖	2003/10~2011/09	111	5.41%
26	Chi-Nan Chen 陳計男	1994/09~2003/09	178	5.37%
27	Chung-Mo Cheng 城仲模 03	2003/10~2006/04	41	4.76%
28	Tsay-Chuan Hsieh 謝在全 07	2007/10~2010/10	46	4.35%
29	In-Jaw Lai 賴英照 07	2007/10~2010/10	48	4.26%
30	Ho-Hsiung Wang 王和雄 03	2003/10~2007/09	64	3.91%
30	Tsay-Chuan Hsieh 謝在全 03	2003/10~2007/09	63	3.91%
32	Chi-Ming Chih 池啟明	2007/10~2015/09	83	3.61%
33	Geng Wu 吳庚	1994/09~2003/09	197	3.55%
34	In-Jaw Lai 賴英照 03	2003/10~2007/09	60	3.33%
34	Herbert Han-Pao Ma 馬漢寶 85	1985/08~1994/07	30	3.33%
36	In-Jaw Lai 賴英照 99	1999/02~2000/10	33	3.03%
36	Chien-Hua Yang 楊建華 85	1985/08~1994/07	33	3.03%
36	Chih-Peng Lee 李志鵬	1985/08~1994/07	33	3.03%
39	Yueh-Chin Hwang 黃越欽	1999/02~2003/09	83	3.01%
40	Geng Wu 吳庚 85	1985/08~1994/07	34	2.94%
41	Young-Mou Lin 林永謀 03	2003/10~2007/09	54	2.78%
42	Tong-Schung Tai 戴東雄	1994/09~2003/09	186	2.69%
43	Tze-Chien Wang 王澤鑑	1994/09~2003/09	184	2.17%
44	Tieh-Cheng Lu 劉鐵錚	1994/09~2003/09	192	1.30%
45	Tsay-Chuan Hsieh 謝在全 99	1999/02~2003/09	84	1.18%
46	Vincent Sze 施文森	1994/09~2003/09	191	1.05%
47	Hsiang-Fei Tung 董翔飛	1994/09~2003/09	189	0.53%
48	Hua-Sun Tseng 曾華松	1994/09~2003/09	191	0.52%
49	Yueh-Sheng Weng 翁岳生 94	1994/09~1999/01	195	0.51%
50	Huey-Ing Yang 楊慧英	1994/09~2003/09	196	0.51%
51	Ho-Hsiung Wang 王和雄 94	1994/09~2003/09	191	0.00%
51	Kuo-Hsien Lin 林國賢	1994/09~1997	56	0.00%
51	Chung-Mo Cheng 城仲模 94	1994/09~1998/07	97	0.00%
51	Yueh-Sheng Weng 翁岳生 03	2003/10~2007/09	65	0.00%
51	Hau-Min Rai 賴浩敏	2010/10~2018/10	35	0.00%
51	Hsi-Chun Huang 黃璽君	2011/10~2019/09	26	0.00%
51	Tieh-Cheng Liu 劉鐵錚 85	1985/08~1994/07	34	0.00%

Rank	Justice's Name	Tenure	At Vote	Concurring Average
51	Yueh-Sheng Weng 翁岳生 85	1985/08~1994/07	34	0.00%
51	Chung-Sheng Lee 李鐘聲 85	1985/08~1994/07	34	0.00%
51	Chien-Tsai Chang 鄭健才	1985/08~1994/07	34	0.00%
51	Shau-Hsien Chai 翟紹先 85	1985/08~1994/07	34	0.00%
51	Yu-Ling Yang 楊與齡 85	1985/08~1994/07	34	0.00%
51	Zu-Zan Yang 楊日然 85	1985/08~1994/07	17	0.00%
51	Shen-An Shih 史錫恩	1985/08~1994/07	31	0.00%
51	Rui-Tang Chen 陳瑞堂	1985/08~1994/07	34	0.00%
51	Cheng-Tao Chang 張承韜	1985/08~1994/07	34	0.00%
51	Teh-Sheng Chang 張特生	1985/08~1994/07	34	0.00%

### Appendix 2: Individual TCC Justices' Career Dissenting Averages: 1994-2013

Rank	Justice's Name	Tenure	At Vote	Dissenting Average
1	Te-Chung Tang 湯德宗	2011/10~2019/09	26	43.75%
2	Shin-Min Chen 陳新民	2008/11~2016/10	60	43.33%
3	Hsi-Chun Huang 黃璽君	2011/10~2019/09	26	36.00%
4	Yu-hsiu Hsu 許玉秀	2003/10~2011/09	111	24.32%
5	Chang-Fa Lo 羅昌發	2011/10~2019/09	25	24.00%
6	Yeong-Chin Su 蘇永欽	2010/10~2018/10	35	22.86%
7	Mao-Zong Huang 黃茂榮	2008/11~2016/10	65	20.00%
8	Chen-Shan Li 李震山	2007/10~2015/09	77	19.08%
9	Pai-Hsiu Yeh 葉百修	2008/11~2016/10	66	15.91%
10	Yih-Nan Liaw 廖義男	2003/10~2007/09	65	14.06%
11	Chi-Ming Chih 池啟明	2007/10~2015/09	83	13.25%
12	Chien-Tsai Chang 鄭健才	1985/08~1994/07	34	11.76%
13	Jyun-Hsiung Su 蘇俊雄	1994/09~2003/09	194	11.60%
14	SU, Beyue C. 陳碧玉	2011/10~2019/09	26	11.54%
15	Tzu-Yi Lin 林子儀	2003/10~2011/09	114	11.26%
16	Chun-Sheng Chen 陳春生	2008/11~2016/10	64	11.11%
17	Jen-Shou Yang 楊仁壽	2003/10~2006/02	42	10.47%
18	Tieh-Cheng Lu 劉鐵錚	1994/09~2003/09	192	10.16%
19	Sen-Yen Sun 孫森焱	1994/09~2003/09	187	9.89%

Rank	Justice's Name	Tenure	At Vote	Dissenting Average
20	Sea-Yau Lin 林錫堯	2007/10~2015/09	81	9.88%
21	Tzong-Li Hsu 許宗力	2003/10~2011/09	115	9.73%
22	Tieh-Cheng Liu 劉鐵錚 85	1985/08~1994/07	34	8.82%
23	Chi-Nan Chen 陳計男	1994/09~2003/09	178	8.76%
24	Yueh-Chin Hwang 黃越欽	1999/02~2003/09	83	7.83%
25	Feng-Zhi Peng 彭鳳至	2003/10~2008/09	70	7.25%
26	Hsiang-Fei Tung 董翔飛	1994/09~2003/09	189	6.91%
27	Ming Chen 陳敏	2008/11~2016/10	61	6.56%
28	Pi-Hu Hsu 徐璧湖	2003/10~2011/09	111	6.31%
29	Chien-Hua Yang 楊建華 85	1985/08~1994/07	33	6.06%
29	Chih-Peng Lee 李志鵬	1985/08~1994/07	33	6.06%
31	Teh-Sheng Chang 張特生	1985/08~1994/07	34	5.88%
32	Vincent Sze 施文森	1994/09~2003/09	191	5.76%
33	Syue-Ming Yu 余雪明	2003/10~2007/09	64	5.56%
34	Ho-Hsiung Wang 王和雄 03	2003/10~2007/09	64	5.47%
35	Chung-Mo Cheng 城仲模 94	1994/09~1998/07	97	4.12%
36	Young-Mon Lin 林永謀 94	1994/09~2003/09	185	3.76%
37	Ching-You Tsay 蔡清遊	2007/10~2015/09	82	3.66%
38	Herbert Han-Pao Ma 馬漢寶 85	1985/08~1994/07	30	3.33%
39	Chung-Sheng Lee 李鐘聲 85	1985/08~1994/07	34	2.94%
39	Geng Wu 吳庚 85	1985/08~1994/07	34	2.94%
39	Shau-Hsien Chai 翟紹先 85	1985/08~1994/07	34	2.94%
39	Yu-Ling Yang 楊與齡 85	1985/08~1994/07	34	2.94%
39	Rui-Tang Chen 陳瑞堂	1985/08~1994/07	34	2.94%
39	Cheng-Tao Chang 張承韜	1985/08~1994/07	34	2.94%
45	Young-Mou Lin 林永謀 03	2003/10~2007/09	54	2.78%
46	Tong-Schung Tai 戴東雄	1994/09~2003/09	186	2.69%
47	Ho-Hsiung Wang 王和雄 94	1994/09~2003/09	191	2.62%
47	Hua-Sun Tseng 曾華松	1994/09~2003/09	191	2.62%
49	Geng Wu 吳庚	1994/09~2003/09	197	2.54%
50	Tsay-Chuan Hsieh 謝在全 99	1999/02~2003/09	84	2.35%
51	Tsay-Chuan Hsieh 謝在全 03	2003/10~2007/09	63	2.34%
52	Tze-Chien Wang 王澤鑑	1994/09~2003/09	184	1.63%
53	Yu-Tien Tseng 曾有田	2003/10~2007/09	65	1.54%
54	Huey-Ing Yang 楊慧英	1994/09~2003/09	196	0.51%
55	Yueh-Sheng Weng 翁岳生 94	1994/09~1999/01	195	0.00%

Rank	Justice's Name	Tenure	At Vote	Dissenting Average
55	Kuo-Hsien Lin 林國賢	1994/09~1997	56	0.00%
55	In-Jaw Lai 賴英照 99	1999/02~2000/10	33	0.00%
55	In-Jaw Lai 賴英照 02	2002/06~2003/09	18	0.00%
55	Yueh-Sheng Weng 翁岳生 03	2003/10~2007/09	65	0.00%
55	Chung-Mo Cheng 城仲模 03	2003/10~2006/04	41	0.00%
55	In-Jaw Lai 賴英照 03	2003/10~2007/09	60	0.00%
55	Tsay-Chuan Hsieh 謝在全 07	2007/10~2010/10	46	0.00%
55	In-Jaw Lai 賴英照 07	2007/10~2010/10	48	0.00%
55	Hau-Min Rai 賴浩敏	2010/10~2018/10	35	0.00%
55	Yueh-Sheng Weng 翁岳生 85	1985/08~1994/07	34	0.00%
55	Zu-Zan Yang 楊日然 85	1985/08~1994/07	17	0.00%
55	Shen-An Shih 史錫恩	1985/08~1994/07	31	0.00%

## Reference

- Barton, Benjamin H., & Moran, Emily. (2013). Measuring Diversity on the Supreme Court with Biodiversity Statistics. *Journal of Empirical Legal Studies*, 10(1): 1–34.
- Buis, Maarten L., 2010. ZOIB: Stata module to fit a zero-one inflated beta distribution by maximum likelihood. <https://ideas.repec.org/c/boc/bocode/s457156.html>, revised 08 Aug 2012.
- Calderia, Gregory A., & Zorn, Christopher J. W. (1998). Of Time and Consensual Norms in the Supreme Court. *American Journal of Political Science*, 42(3): 874–902.
- Chang, Wen-Chen. (2013). 司法院大法官解釋意見書撰寫之實證研究 (Sifayuan dafaguan jieshi yijianshu zhuanxie zhi shizheng yanjiu.) In 司法院大法官一〇二年度學術研討會(下)(Sifayuan dafaguan yi ling er niandu xueshu yantaohui, xia.) Pp. 37–68). National Chengchi University. [Written in Chinese]
- Chen, Shu-fang (1999). Die Abweichende Meinung in der Rechtsprechung-Die Diskussion in Deutschland. *Chengchi Law Review*, (62):105–127. [Written in Chinese]
- Clark, Tom S. 2009. Measuring Ideological Polarization on the United States Supreme Court. *Political Research Quarterly* 62 (1): 146–57.

- Corley, Pamela C. (2010). *Concurring opinion writing on the U.S. Supreme Court*. Albany: SUNY Press.
- Corley, Pamela C., Steigerwalt, Amy. & Ward, Artemus. (2013). *The puzzle of unanimity: consensus on the United States Supreme Court*. Stanford, CA: Stanford University Press.
- Epstein, Lee, Knight, Jack, & Martin, Andrew. (2003). The Norm of Prior Judicial Experience and Its Consequences for Career Diversity on the U.S. Supreme Court. *California Law Review*, 91(4): 903-965.
- Epstein, Lee, Landes, William M, & Posner, Richard A. (2013). *The Behavior of Federal Judges: a Theoretical and Empirical Study of Rational Choice*. Cambridge, Mass.: Harvard University Press.
- George, Tracey E. 2008. From Judge to Justice: Social Background Theory and the Supreme Court. *North Carolina Law Review* 86: 1333–68.
- Hendershot, Marcus E., Hurwitz, Mark S., Lanier, Drew Noble, & Pacelle, Richard L., Jr. (2012). Dissensual Decision Making: Revisiting the Demise of Consensual Norms within the U.S. Supreme Court. *Political Research Quarterly*, 66(2): 467–481.
- Henderson, M. Todd. (2007). From Seriatim to Consensus and Back Again: A Theory of Dissent. *The Supreme Court Review*, 2007(1): 283–344.
- Hettinger, Virginia A., Lindquist, Stefanie A., & Martinek, Wendy L. (2007). *Judging on a Collegial Court: Influences on Federal Appellate Decision Making*. Charlottesville: University of Virginia Press.
- Hwang, Jau-Yuan. (2012). Taiwan's Constitutional Court from 2003 to 2011: New Appointments and Different Performance. *Seoul Law Journal*, 53(2): 41–63.
- Lee, Chien-Liang. (1999). 不同意見書與釋憲制度－德國與我國法制實務的比較研究(Butong yijianshu yu shixian zhidu - deguo yu woguo fazhi shiwu de bijiao yanjiu.) *The Constitutional Review*, 25(1):72–101. [Written in Chinese]
- Lin, Chia-Ho. (2014). Rethinking Dissenting Opinions in Constitutional Courts-Perspective from the German Experience. *Fu Jen Law Review*, 48:1–69. [Written in Chinese]
- Michelman, Frank. (1988). Law's Republic. *The Yale Law Journal*, 97(8): 1493–1537.
- Segal, Jeffrey Allan, and Harold J Spaeth. 2007. *The Supreme Court and the*



*Attitudinal Model Revisited*. New York, NY: Cambridge University Press.

Su, Yen-Tu. (2014). A Time for Constitutional Adjudication: A Preliminary Study of the Law and Politics of Agenda-Setting. *The Constitutional Review*. 39(4): 1-45. [Written in Chinese]

Su, Yen-Tu, & Ho, Han-Wei. (2014). Judging, Sooner or Later: A Study of Decision Timing in Taiwan's Constitutional Court. In *The 9th Annual Conference on Empirical Legal Studies*, USA: U. C. Berkeley.

Su, Yeong-Chin. (2013a). 部門憲法的基本思維——一個在職大法官心所謂危的自剖 (Bumen xianfa de jiben siwei -- yige zaizhi dafaguan xinsuoweimei de zipou.) *Taiwan Law Journal*, 226: 89-02. [Written in Chinese]

Su, Yeong-Chin. (2013b). 憲法裁判的評決與書寫 (Xianfa caipan de pingjue yu shuxie.) Pp. 1-22. In 法治斌教授逝世十周年紀念學術研討會：公法研究的傳承與開展—世代間的對話 (*Fa Zhi-Bin jiaoshou shishi shizhounian jinian xueshu yantaohui: gongfa yanjiu de chuancheng yu kaizhan -- shidai jian de duihua.*) [Written in Chinese]

Taiwan Constitutional Court Interpretation Database (TCCID), 2015, IAS. <http://www.els.ias.sinica.edu.tw/ias/public/database>

Taiwan Constitutional Court Justices Database (TCCJD), forth coming 2016, IAS.

Tang, Dennis Te-Chung. (1998). An Empirical Study of Separate Opinions in the Council of Grand Justices of Taiwan. In *Separation of Power Revisited*. Pp. 385-450. Taipei: Angle. [Written in Chinese]

Wahlbeck, Paul J., James F. Spriggs, and Forrest Maltzman. 1999. The Politics of Dissents and Concurrences on the U.S. Supreme Court. *American Politics Research* 27 (4): 488-514.

Waldron, Jeremy. (1999). *Law and Disagreement*. Oxford: Oxford University Press.

Walker, Thomas G., Epstein, Lee, & Dixon, William J. (1988). On the Mysterious Demise of Consensual Norms in the United States Supreme Court. *The Journal of Politics*, 50(2): 361-389.

Weng, Yueh-Sheng. (2009). Guardian of Constitution: Introspection and Anticipation (Keynote Address). In *Constitutional Interpretation: Theory and Practice* Vol. 6, pp. 1-169. (Fort Fu-Te Liao ed.) Taipei: Institutum Iurisprudentiae, Academia Sinica. [Written in Chinese]

- \_\_\_\_\_. (2014). New Developments in Constitutional Interpretation of the Constitutional Court. *The Constitutional Review*, 39 (4): 1-23. [Written in Chinese]
- Yeh, Jiunn-Rong. (2009). 分裂社會，團結法院——論民主轉型脈絡中「首席」大法官的角色 (Fenlie shehui, tuanjie fayuan -- lun minzhu zhuanxing mailuo zhong 'shouxi' dafaguan de jiaose.) In 法治的開拓與傳承：翁岳生教授的公法世界 (*Fazhi de kaitou yu chuancheng : Weng Yue-Sheng jiaoshou de gongfa shijie.*) (Jiunn-Rong Yeh, Wen-Chen Chang, & Ming-Hsin Lin eds.) Pp. 81–96. Taipei: Angle. [Written in Chinese]